

[00223]

**WE CLAIM:**

1. A method, comprising:  
  
filtering an ingress call based on a plurality of ingress-call parameter values;  
  
converting a filtered ingress-call parameter value and at least one filtered ingress-call-peer parameter value from a plurality of ingress-call-peer parameter values to an egress-call parameter value and an egress-call-peer parameter value, respectively;  
  
filtering an egress call based on a plurality of egress-call parameter values, the plurality of egress-call parameter values including the egress-call parameter value; and  
  
modifying a parameter value for the egress call based on a plurality of egress-call-peer parameter values, the plurality of egress-call-peer parameter values including the egress-call-peer parameter value.
2. The method of claim 1, further comprising:  
  
tagging the ingress call based on the ingress-call parameter values and the egress-call-peer parameter values,  
  
the modifying for the ingress call being based on the tagged ingress call.
3. The method of claim 1, further comprising associating the ingress call with an ingress-call peer based on the ingress-call parameter values and the ingress-call-peer parameter values.
4. The method of claim 1, further comprising:

identifying the ingress-call source using the ingress-call parameter values and the ingress-call-peer parameter values;

applying a common source policy to the identified ingress call; and

filtering the identified ingress call based on the common source policy.

5. The method of claim 1, further comprising selecting a first destination from an identified group of destinations for the ingress call based on a criterion, the criterion being at least one selected from a filter priority, a call-peer priority, a filter match strength, or an administration filter policy.

6. The method of claim 1, further comprising selecting a first destination from an identified group of destinations for the ingress call based on time-of-day filtering or load-balancing.

7. The method of claim 1, further comprising selecting a first destination from an identified group of destinations for the ingress call based on at least one of a least recently used destination or a percent utilization of a destination.

8. The method of claim 1, further comprising selecting a first destination from an identified group of destinations for the ingress call based on at least one of an ISDN/SIP response code for run-time or a redirect.

9. The method of claim 1, further comprising mapping an error code for a dropped call when the error code is returned back to a caller, the mapping including at least one of ceasing attempts to terminate the ingress call or redirecting the ingress call.
10. The method of claim 1, further comprising associating the ingress call with an ingress-call peer based on an automatic number identification (ANI) associated with the ingress call.
11. The method of claim 1, further comprising associating the ingress call with an ingress-call peer based on the plurality of ingress-call parameter values, the plurality of ingress-call-peer parameter values and an automatic number identification (ANI) associated with a call origination and common to all terminations.
12. The method of claim 1, further comprising:
- associating the ingress call with an ingress-call-peer based on the plurality of ingress-call parameter values and the plurality of ingress-call-peer parameter values, and an automatic number identification (ANI) associated with the ingress call;
  - tagging the ingress call to produced a tagged ingress call;
  - instantiating the egress call based on the tagged ingress call; and
  - filtering the egress call based on the tagged ingress call.
13. The method of claim 1, further comprising associating the ingress call with an egress-call peer based on the plurality of egress-call parameter values, the plurality of ingress-call-peer

parameter values and an automatic number identification (ANI) associated with a call termination and common to all originations.

14. The method of claim 1, further comprising:  
tagging the ingress call based on a required class of service; and  
the modifying the parameter value for the ingress call being based on the tagged ingress call.
15. The method of claim 1, further comprising:  
tagging the ingress call based on automatic number identification (ANI) associated with the ingress call; and  
selecting a termination based on the tagged ingress call.
16. The method of claim 1, further comprising:  
tagging the ingress call based on a dialed number identification; and  
terminating the ingress call based on a tag applied during the tagging.
17. The method of claim 1, further comprising:  
selecting a first destination for the ingress call among an identified group of destinations based on a criterion; and  
abandoning a call attempt to the first destination when a maximum number of call attempts for a call source has been reached.

18. The method of claim 1, further comprising:
- selecting a first destination for the ingress call among an identified group of destinations based on a criterion; and
  - abandoning a call attempt to the first destination when a maximum post-dial delay for a call source has been reached.
19. The method of claim 1, further comprising instantiating a call peer and a device based on the plurality of ingress-call parameter values, the plurality of egress-call-peer parameter values, and the plurality of egress-call parameter values when the call peer does not exist and the when device does not exist.
20. The method of claim 1, further comprising:
- identifying a source of the ingress call based on a qualifier; and
  - applying a routing policy to the ingress call based on the source.
21. The method of claim 1, further comprising:
- identifying a source of the ingress call based on at least one of a layer 2 qualifier or a layer 3 qualifier; and
  - applying a routing policy to the ingress call based on the source.
22. The method of claim 1, further comprising:
- identifying a source of the ingress call based on a virtual LAN identifier associated with the ingress call; and

applying a routing policy to the ingress call based on the source.

23. The method of claim 1, further comprising:

identifying a source of the ingress call based on at least one of a layer 2 qualifier or a layer 3 qualifier; and

applying a marker to the ingress call based on the source, the marker adapted to be used by an egress network for quality of service.

24. The method of claim 1, further comprising:

identifying the source of the ingress call based on a DiffServ/TOS marking associated with the ingress call; and

applying a routing policy to the ingress call based on the source.

25. The method of claim 1, further comprising:

identifying a source of the ingress call based on a priority-bit identifier associated with the ingress call; and

applying a routing policy to the ingress call based on the source.

26. A computer program stored on a computer-readable medium, the computer program comprising:

a first filtering instruction to filter an ingress call based on a plurality of ingress-call parameter values;

a converting instruction to convert a filtered ingress-call parameter value and at least one filtered ingress-call-peer parameter value from a plurality of ingress-call-peer parameter values to an egress-call parameter value and an egress-call-peer parameter value, respectively;

a second filtering instruction configured to filter an egress call based on a plurality of egress-call parameter values, the plurality of egress-call parameter values including the egress-call parameter value; and

a second modifying instruction configured to modify a parameter value for the egress call based on a plurality of egress-call-peer parameter values, the plurality of egress-call-peer parameter values including the egress-call-peer parameter value.

27. A method, comprising:

identifying a source associated with an ingress call;

applying a common source policy to the ingress call based on the source;

tagging a parameter value associated with the ingress call based on the common source policy to produce a tagged parameter value; and

matching an egress call associated with the ingress call based on the tagged parameter value.

28. A computer program stored on a computer-readable medium, the computer program comprising:

an identifying instruction configured to identify a source associated with an ingress call;

an applying instruction configured to apply a common source policy to the ingress call based on the source;

a tagging instruction configured to tag a parameter value associated with the ingress call based on the common source policy to produce a tagged parameter value; and

a matching instruction configured to match an egress call with a corresponding ingress call based on the tagged parameter value.

29. A method, comprising;

matching a source endpoint to an ingress call when the ingress call is associated with a specifically-determinable source endpoint; and

identifying a first destination from a plurality of destinations associated with the ingress call when the ingress call is not associated with a specifically-determinable source endpoint, the identifying being based on at least one of a filter parameter, an administrative-policy parameter or a run-time criteria parameter.

30. The method of claim 29, further comprising:

abandoning a call attempt to the first destination when a maximum number of call attempts for a call source has been reached.

31. The method of claim 29, further comprising:

abandoning a call attempt to the first destination when a maximum post-dial delay for a call source has been reached.

32. The method of claim 29, wherein the filter parameter is at least one of a filter priority or a filter match strength.



33. The method of claim 29, wherein the administrative-policy parameter is at least one of a call-peer priority or an administration filter policy.
34. The method of claim 29, wherein the run-time criteria parameter is at least one of a time-of-day filtering or a load-balancing.
35. The method of claim 29, wherein the identifying is further based on at least one of a least recently used destination or a percent utilization of a destination.
36. The method of claim 29, wherein the run-time criteria parameter is at least one of an ISDN/SIP response code for run-time or a redirect.
37. A computer program stored on a computer-readable medium, the computer program comprising:
- a matching instruction to match a source endpoint to an ingress call when the ingress call is associated with a specifically-determinable source endpoint; and
  - an identifying instruction to identify a first destination from a plurality of destinations associated with the ingress call when the ingress call is not associated with a specifically-determinable source endpoint, the identifying being based on at least one of a filter parameter, an administrative-policy parameter or a run-time criteria parameter.

38. The computer program stored on a computer-readable medium of claim 37, the computer program further comprising:

abandoning a call attempt to the first destination when a maximum number of call attempts for a call source has been reached.

39. The computer program stored on a computer-readable medium of claim 37, the computer program further comprising:

abandoning a call attempt to the first destination when a maximum post-dial delay for a call source has been reached.

40. The computer program stored on a computer-readable medium of claim 37, wherein the filter parameter is at least one of a filter priority or a filter match strength.

41. The computer program stored on a computer-readable medium of claim 37, wherein the administrative-policy parameter is at least one of a call-peer priority or an administration filter policy.

42. The computer program stored on a computer-readable medium of claim 37, wherein the run-time criteria parameter is at least one of a time-of-day filtering or a load-balancing.

43. The computer program stored on a computer-readable medium of claim 37, wherein the identifying is further based on at least one of a least recently used destination or a percent utilization of a destination.

44. The computer program stored on a computer-readable medium of claim 37, wherein the run-time criteria parameter is at least one of an ISDN/SIP response code for run-time or a redirect.